Record Nr. UNINA9910254621203321 Proceedings of ECCS 2014: European Conference on Complex Systems **Titolo** // edited by Stefano Battiston, Francesco De Pellegrini, Guido Caldarelli, Emanuela Merelli Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 3-319-29228-5 **ISBN** Edizione [1st ed. 2016.] 1 online resource (XVIII, 327 p. 128 illus., 48 illus. in color.) Descrizione fisica Springer Proceedings in Complexity, , 2213-8684 Collana 530 Disciplina Soggetti **Physics** Computational complexity System theory Data mining Applications of Graph Theory and Complex Networks Complexity Complex Systems Data Mining and Knowledge Discovery Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto Preface -- Detection of Non-Self-Correcting Nature of Information Cascade -- Fitting Planar Proximity Graphs on Real Street Networks. -Qualitative Methods for the Exploration of Complexity in Human Social Systems: Applications in Family Psychology -- Tangible Networks: A Toolkit for Exploring Network Science -- The Geometric Origins of Complex Cities -- Revealing the Relation Between Structure of Chloroplast Genomes and Host Taxonomy -- Complex Synchronization Patterns in the Human Connectome Network -- Structure of a Media Co-Occurrence Network -- Spatial Effects of Delay-induced Stochastic Oscillations in a Multi-Scale Cellular System -- An Agent-Based Modelling Approach to Biological Invasion by Macroalgae in European Coastal Environments -- Characterisation of the Idiotypic Immune Network through Persistent Entropy -- Interests Propagation in

Computer Science Research Community -- Nonparametric Estimation

of the Preferential Attachment Function in Complex Networks: Evidence of Deviations from Log Linearity -- N-Gram Events for Analysis of Financial Time Series -- Human Mobility and the Dynamics of Measles in Large Geographical Areas -- Does Training Lead to the Formation of Modules in Threshold Networks? -- Understanding Financial News with Multi-layer Network Analysis -- Channel-Specic Daily Patterns in Mobile Phone Communication -- Investigating the Phonetic Organisation of the English Language via Phonological Networks, Percolation and Markov Models -- An Agent-Based Model for Agricultural Supply Chains: the Case of Uganda -- Chimera States in Neuronal Systems of Excitability type-I -- Multiobjective Optimization and Phase Transitions -- Power Laws as Statistical Mixtures -- A Network-Based Analysis of the European Emission Market -- Dynamics of Commodity Price Fluctuations in Japan -- Understanding the Diffusion of YouTube Videos -- Free Energy Rate Density and Selforganization in Complex Systems.

Sommario/riassunto

This work contains a stringent selection of extended contributions presented at the meeting of 2014 and its satellite meetings, reflecting scope, diversity and richness of research areas in the field, both fundamental and applied. The ECCS meeting, held under the patronage of the Complex Systems Society, is an annual event that has become the leading European conference devoted to complexity science. It offers cutting edge research and unique opportunities to study novel scientific approaches in a multitude of application areas. ECCS'14, its eleventh occurrence, took place in Lucca, Italy. It gathered some 650 scholars representing a wide range of topics relating to complex systems research, with emphasis on interdisciplinary approaches. The editors are among the best specialists in the area. The book is of great interest to scientists, researchers and graduate students in complexity, complex systems and networks.